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HIP AND KNEE REPLACEMENT SURGERY PRIORITY CRITERIA TOOL

PLEASE PRINT CLEARLY

Provincial Health Care Number: _____
 Patient Name: _____

Patient Age: _____ Sex: [circle one] M F

[Tick one box] Left Hip Right Hip Left Knee Right Knee

[Tick one box] Primary Revision

Diagnosis: _____

Surgeon's Name: _____ Phone: _____

Date: _____

Patients must be on appropriate non-surgical treatment prior to evaluation (e.g. medications, walking aids, shoe inserts)

Please check the box that most accurately describes the patient's current situation

1. Pain on motion (e.g. walking, bending): *

- None/mild
- Moderate
- Severe

2. Pain at rest (e.g. while sitting, lying down, or causing sleep disturbance): *

- None
- Mild
- Moderate
- Severe

* Take into account usual duration, intensity, and frequency of pain, including need for narcotic vs. non-narcotic medication.

3. Ability to walk without significant pain :

- Over 5 blocks
- 1-5 blocks
- <1 block
- Household ambulator

4. Other functional limitations (e.g. putting on shoes, managing stairs, sitting to standing, sexual activity, bathing, cooking, recreation or hobbies):

- No limitations
- Mild limitations - able to do most activities with minor modifications or difficulty
- Moderate limitations - able to do most activities with modification or assistance
- Severe limitations - unable to perform most activities

(PRIOR ART)

FIGURE 1

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5. Abnormal findings on physical exam related to affected joint (e.g. deformity, instability, leg length difference, restriction of range of motion on examination):
- None/mild
 - Moderate
 - Severe
6. Potential for progression of disease documented by radiographic findings (e.g. recurrent dislocation, x-ray evidence of protrusion, significant bone loss, component wear, impending fracture):**
- None
 - Mild
 - Moderate
 - Severe
- ** Predominantly applies to revisions, use in primary cases only in special circumstances (e.g. ligament instability, bone loss)
7. Threat to patient role and independence in society (i.e. ability to work, give care to dependants, live independently (difficulty must be related to affected joint)):
- Not threatened but more difficult
 - Threatened but not immediately
 - Immediately threatened or unable
8. All things considered, how would you rate the urgency or relative priority of this patient?
(Draw a line across the scale.)

Not Urgent at all

Extremely Urgent
(just short of an emergency)

9. In your clinical judgement what should be the maximum waiting time for this patient?
Number of weeks _____ OR Number of months _____
10. In your practice how long would it take this patient to have surgery done from the time you first see the patient?
Number of days _____ OR Number of weeks _____ OR Number of months _____

Please record any comments on the form, criteria or process: _____

(PRIOR ART)

FIGURE 2

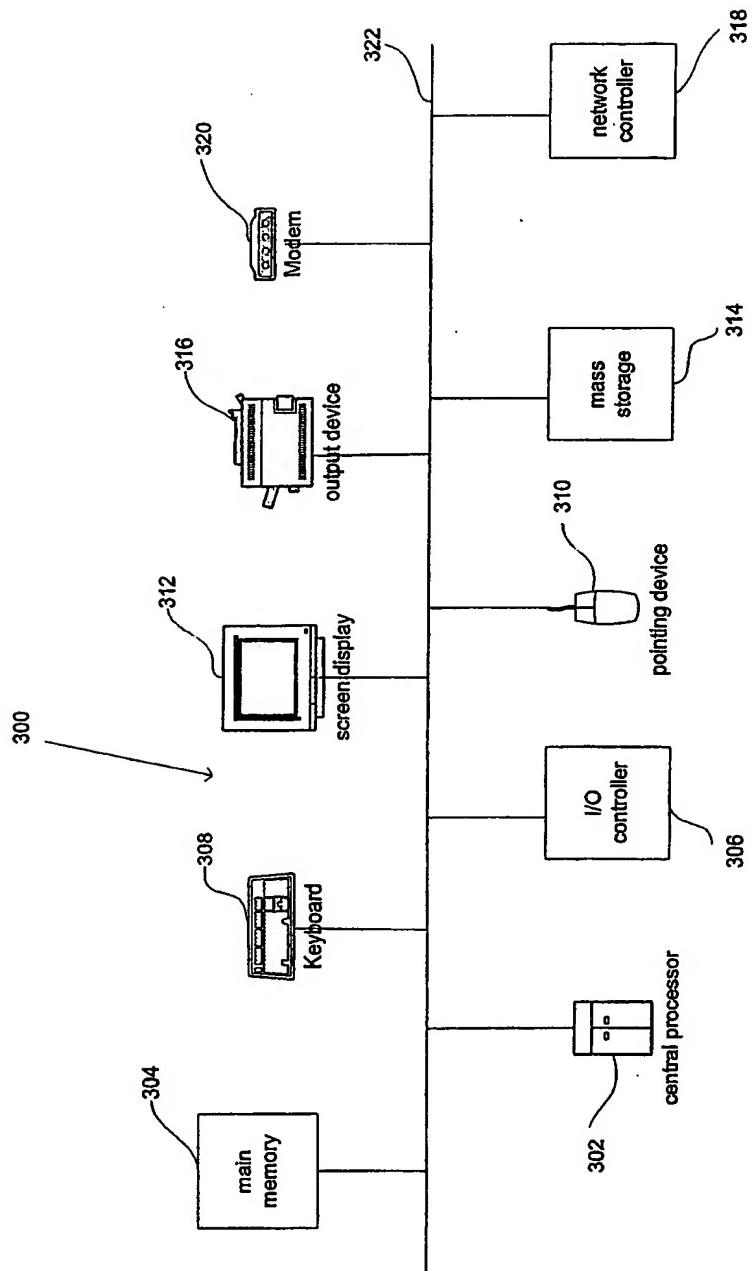
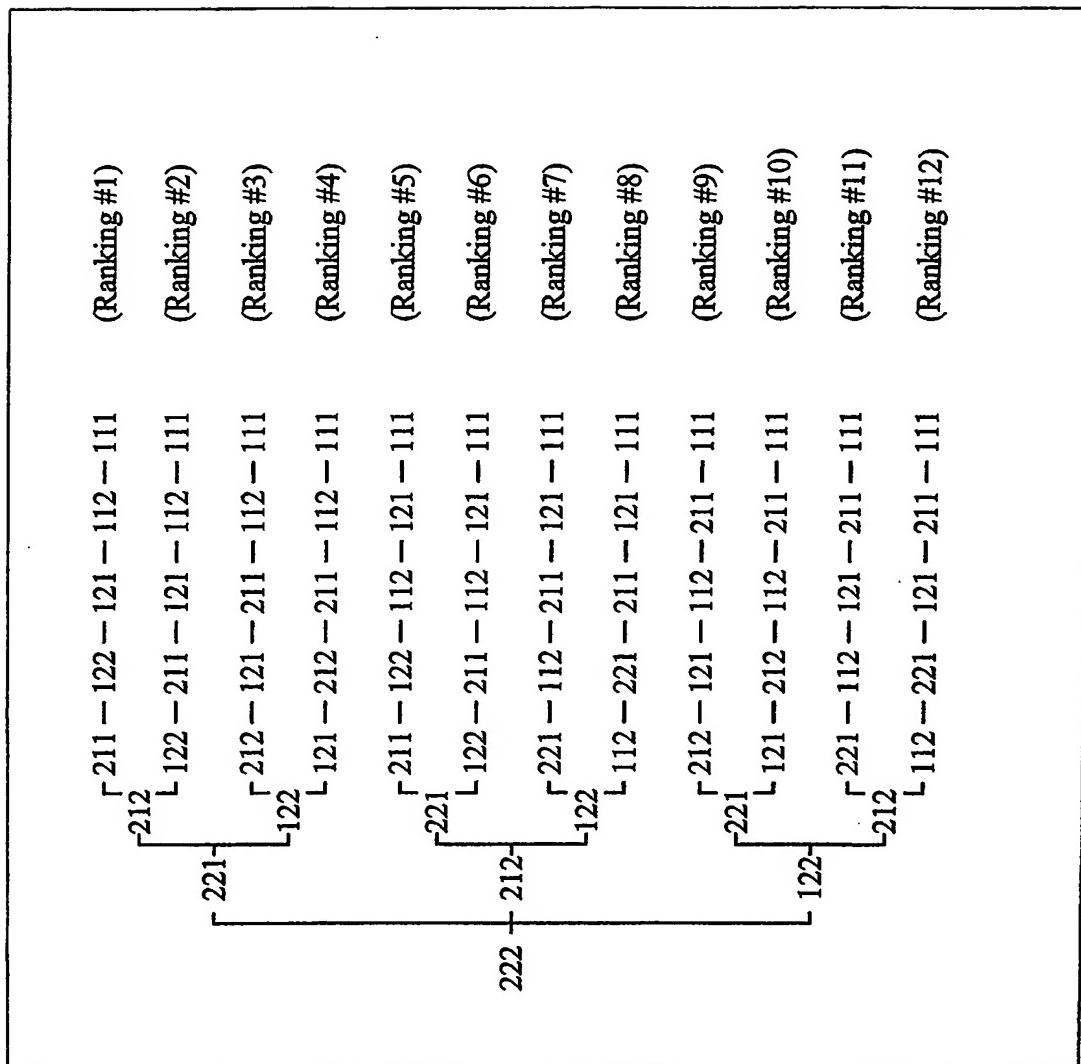
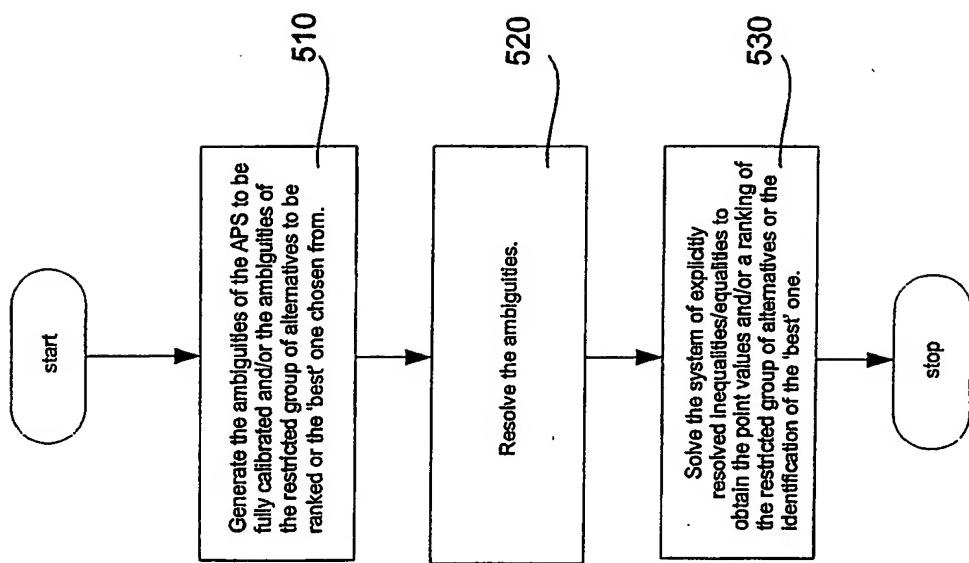


FIGURE 3

**FIGURE 4**

**FIGURE 5**

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versus (vs)	221 $a2+b2+c1$	212 $a2+b1+c2$	122 $a1+b2+c2$	112 $a1+b1+c2$	121 $a1+b2+c1$	211 $a2+b1+c1$
221 $a2+b2+c1$	$b2+c1$ vs $b1+c2$	$a2+c1$ vs $a1+c2$	$a2+b2+c1$ vs $a1+b1+c2$	$a2+b1+c2$ vs $a1+b2+c1$	n.a.	n.a.
212 $a2+b1+c2$		$a2+b1$ vs $a1+b2$		$a2+b1+c2$ vs $a1+b2+c1$		n.a.
122 $a1+b2+c2$					$a1+b2+c2$ vs $a2+b1+c1$	
112 $a1+b1+c2$						
121 $a1+b2+c1$						
211 $a2+b1+c1$						

FIGURE 6

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Criteria	Categories	Profiles	Pairwise comparisons	Degrees	Total ambiguities (Equation 1)	Unique ambiguities (Equation 2)
(x)	(y)	(y ^x)	y ^x (y ^x - 1)/2			
3	2	8	28	2 nd 3 rd	6 3	3 3
				All degrees:	9	6
3	3	27	351	2 nd 3 rd	81 81	27 81
				All degrees:	162	108
3	4	64	2,016	2 nd 3 rd	432 648	108 648
				All degrees:	1,080	756
4	2	16	120	2 nd 3 rd 4 th	24 24 1	6 12 1
				All degrees:	55	25
4	3	81	3,240	2 nd 3 rd 4 th	486 972 567	54 324 567
				All degrees:	2,025	945
4	4	256	32,640	2 nd 3 rd 4 th	3,456 10,368 9,072	216 2,592 9,072
				All degrees:	22,896	11,880
4	5	625	195,000	2 nd 3 rd 4 th	15,000 60,000 70,000	600 12,000 70,000
				All degrees:	145,000	82,600
5	2	32	496	2 nd 3 rd 4 th 5 th	80 120 70 15	10 30 35 15
				All degrees:	285	90
5	3	243	29,403	2 nd 3 rd 4 th 5 th	2,430 7,290 8,505 3,645	90 810 2,835 3,645
				All degrees:	21,870	7,380

FIGURE 7

Criteria	Categories	Profiles	Pairwise comparisons	Degrees	Total ambiguities (Equation 1)	Unique ambiguities (Equation 2)
(x)	(y)	(y ^x)	y ^x (y ^x -1)/2			
5	4	1,024	523,776	2 nd 3 rd 4 th 5 th	23,040 103,680 181,440 116,640	360 6,480 45,360 <u>116,640</u>
				All degrees:	424,800	168,840
5	5	3,125	4,881,250	2 nd 3 rd 4 th 5 th	125,000 750,000 1,750,000 1,500,000	1,000 30,000 350,000 <u>1,500,000</u>
				All degrees:	4,125,000	1,881,000
6	2	64	2,016	2 nd 3 rd 4 th 5 th 6 th	240 480 420 180 31	15 60 105 90 31
				All degrees:	1,351	301
6	3	729	265,356	2 nd 3 rd 4 th 5 th 6 th	10,935 43,740 76,545 65,610 22,599	135 1,620 8,505 21,870 22,599
				All degrees:	219,429	54,729
6	4	4,096	8,386,560	2 nd 3 rd 4 th 5 th 6 th	138,240 829,440 2,177,280 2,799,360 1,446,336	540 12,960 136,080 699,840 <u>1,446,336</u>
				All degrees:	7,390,656	2,295,756
10	4	1,048,576	549,755,289,600	2 nd 3 rd 4 th 5 th 6 th 7 th 8 th 9 th 10 th	106,168,320 1,274,019,840 7,803,371,520 30,098,718,720 77,755,023,360 135,444,234,240 153,584,087,040 102,792,499,200 30,898,215,936	1,620 77,760 1,905,120 29,393,280 303,730,560 2,116,316,160 9,599,005,440 25,698,124,800 <u>30,898,215,936</u>
				All degrees:	539,756,338,76	68,646,770,676

FIGURE 8

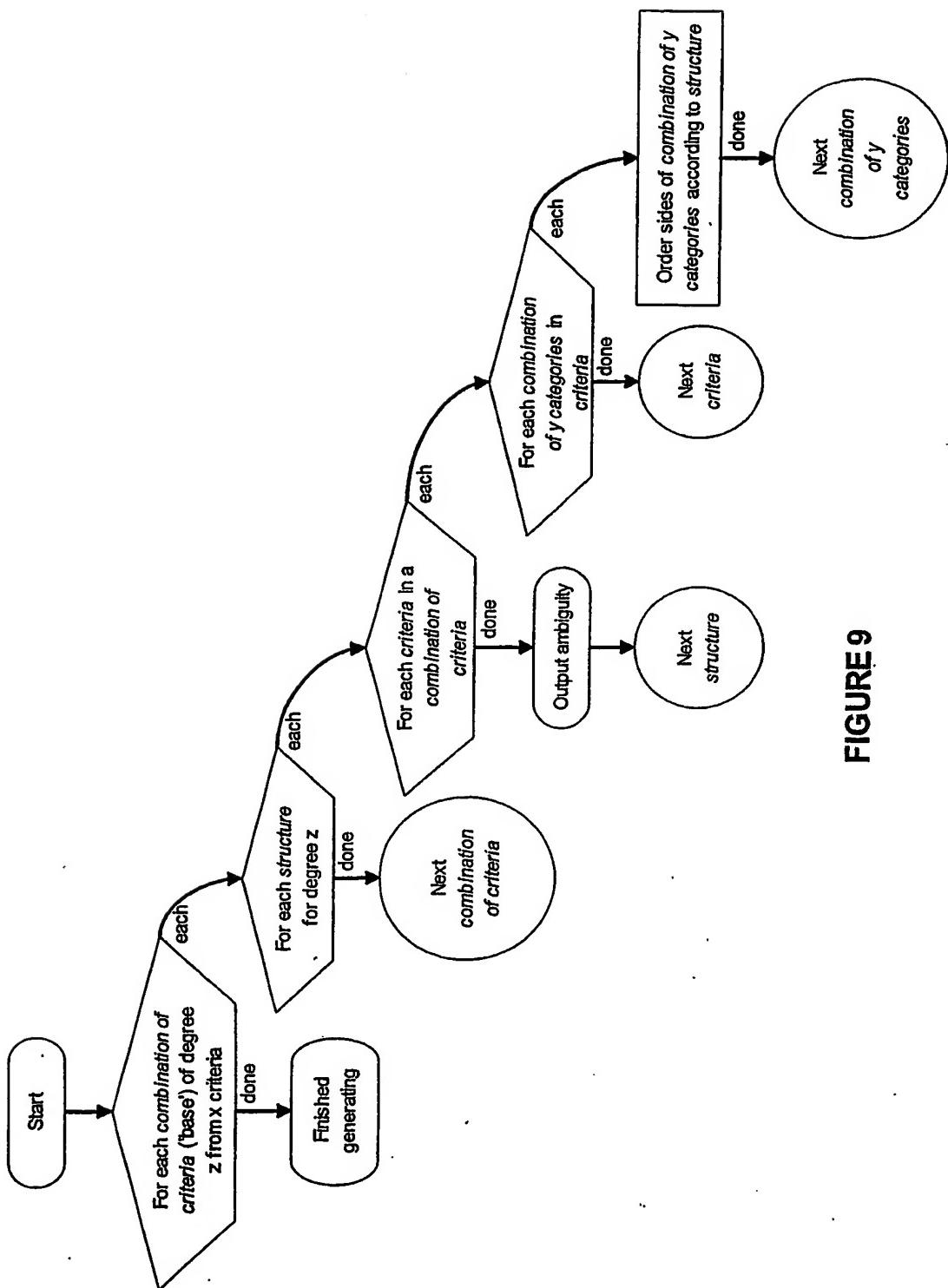


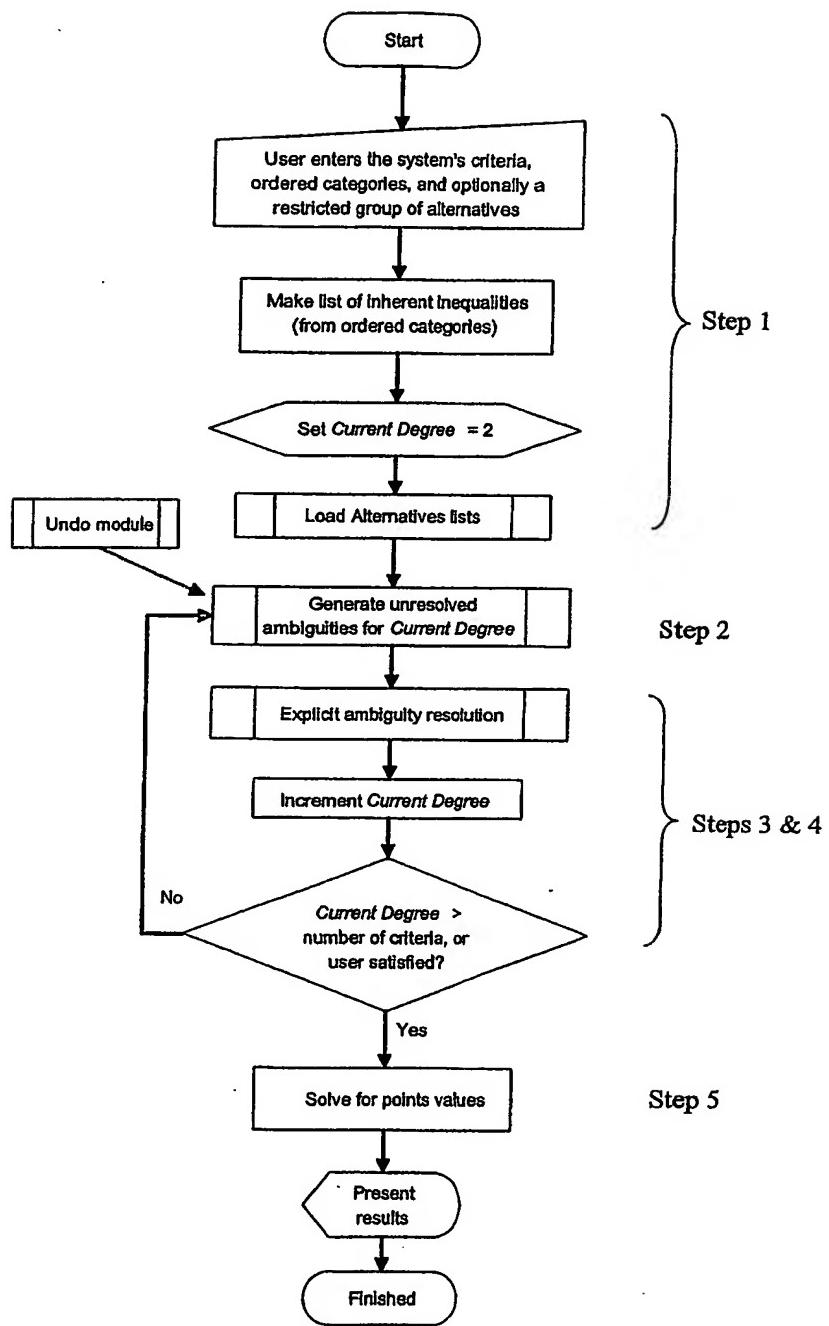
FIGURE 9

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3^{rd} -degree ambiguity	Sufficient conditions for LHS > RHS of the 3^{rd} -degree ambiguity
(4) $a2 + b2 + c1 \leq a1 + b1 + c2$	$a2 + c1 > a1 + c2$ or $a2 + c1 = a1 + c2$ or $b2 + c1 > b1 + c2$ or $b2 + c1 = b1 + c2$
(5) $a2 + b1 + c2 \leq a1 + b2 + c1$	$b1 + c2 > b2 + c1$ or $b1 + c2 > b2 + c1$ or $a2 + b1 = a1 + b2$ or $a2 + b1 = a1 + b2$
(6) $a1 + b2 + c2 \leq a2 + b1 + c1$	$a1 + c2 > a2 + c1$ or $a1 + c2 = a2 + c1$ or $a1 + b2 > a2 + b1$ or $a1 + b2 = a2 + b1$

FIGURE 10

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**FIGURE 11**

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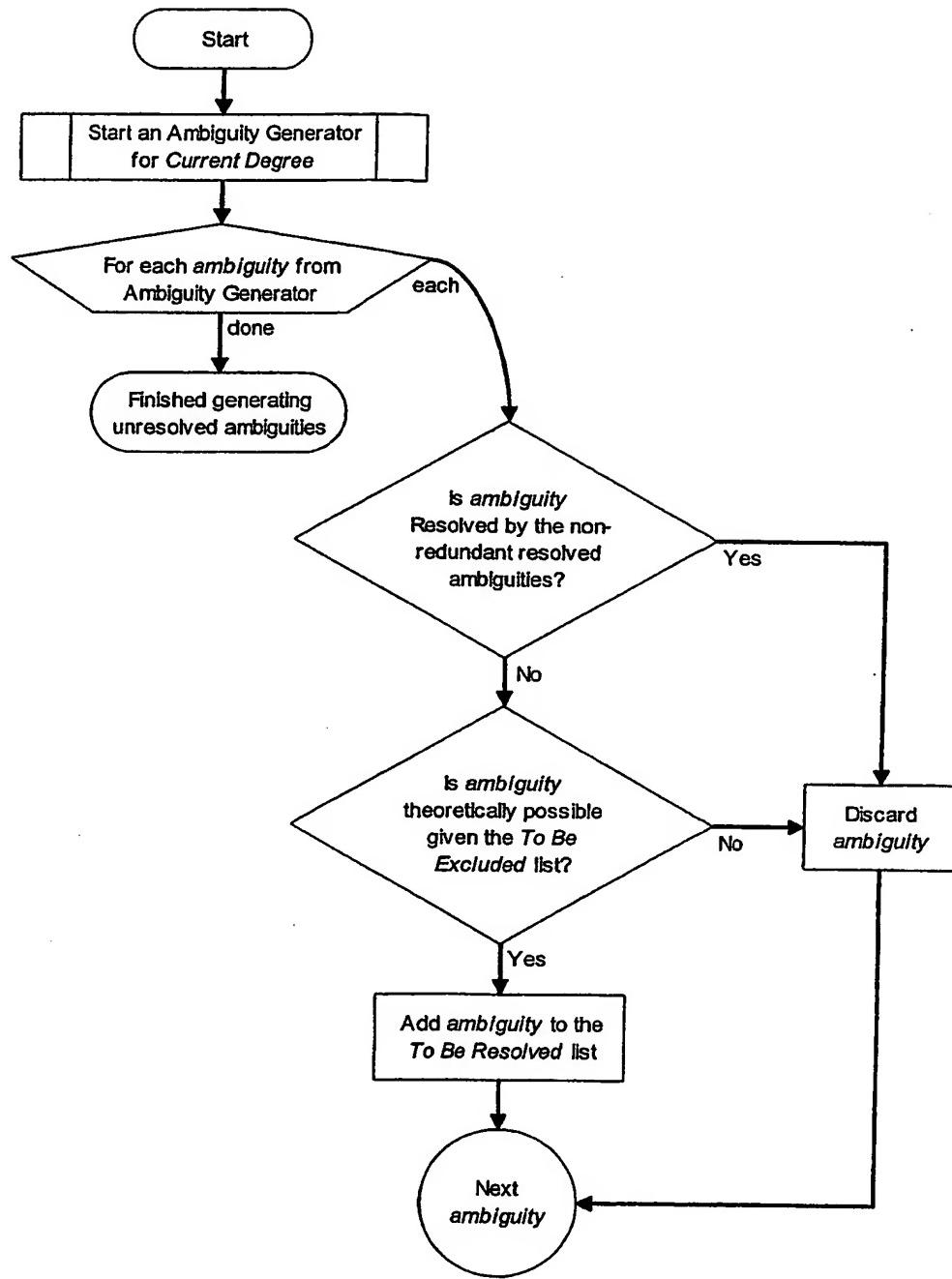


FIGURE 12

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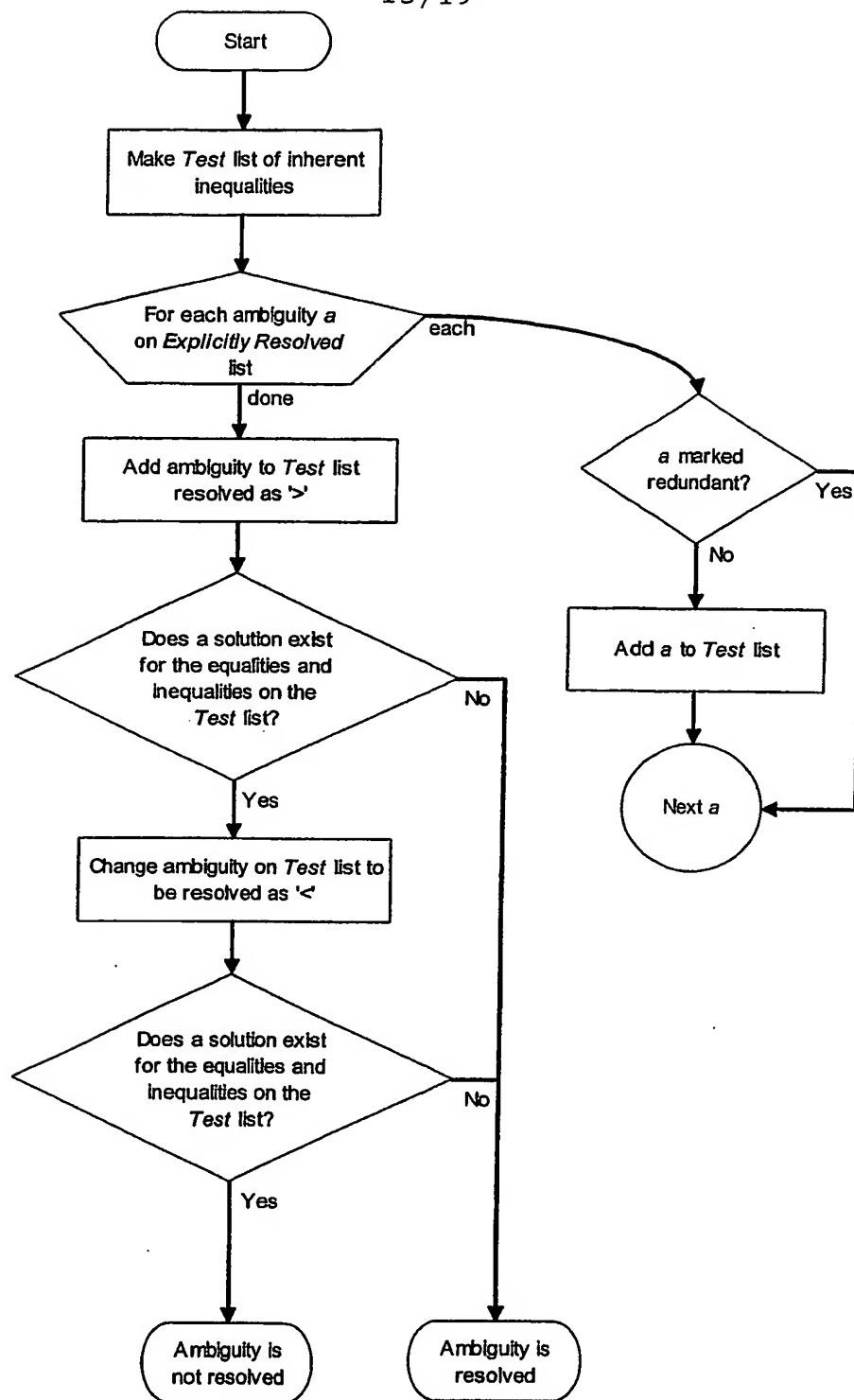


FIGURE 13

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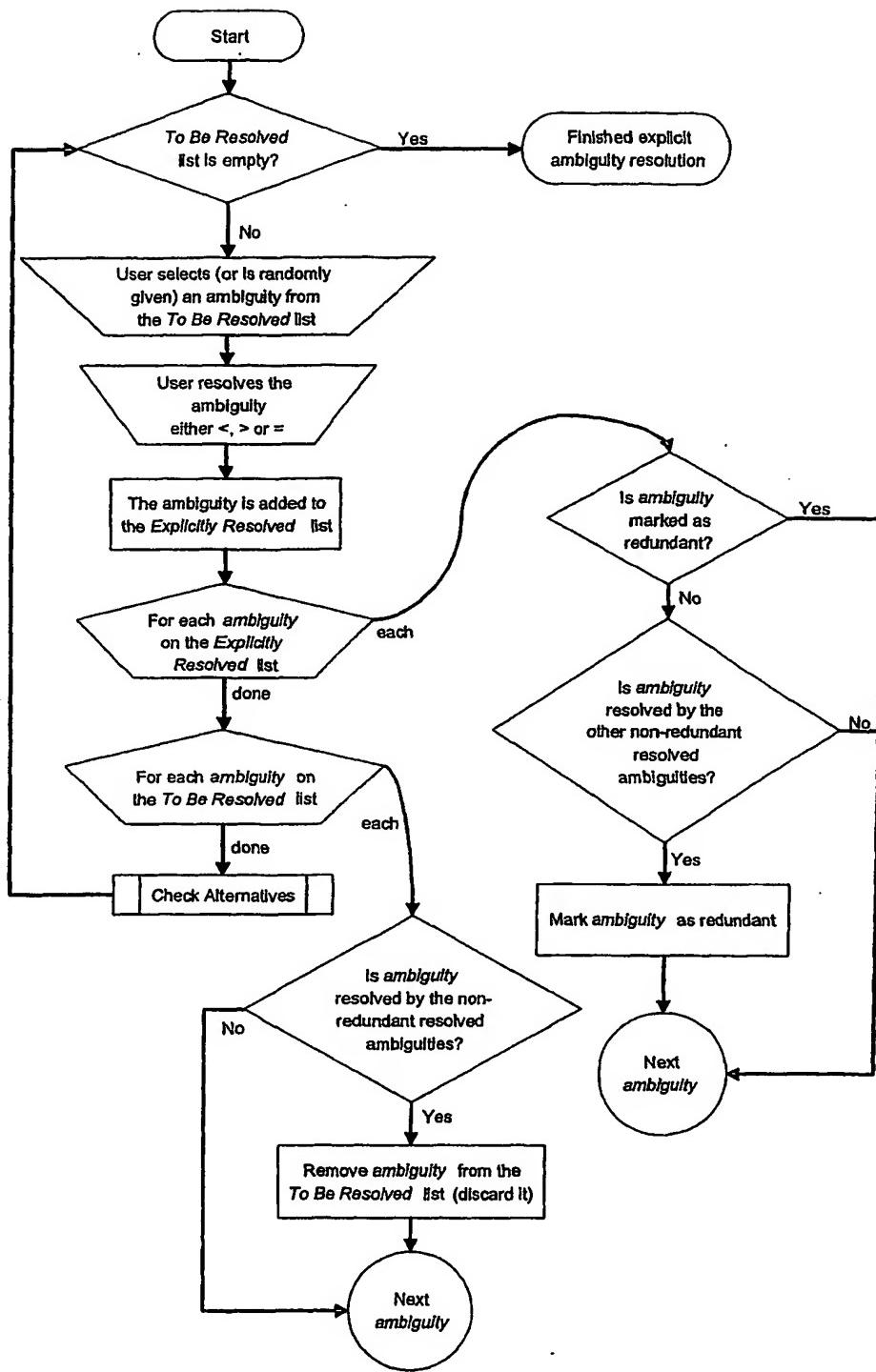


FIGURE 14

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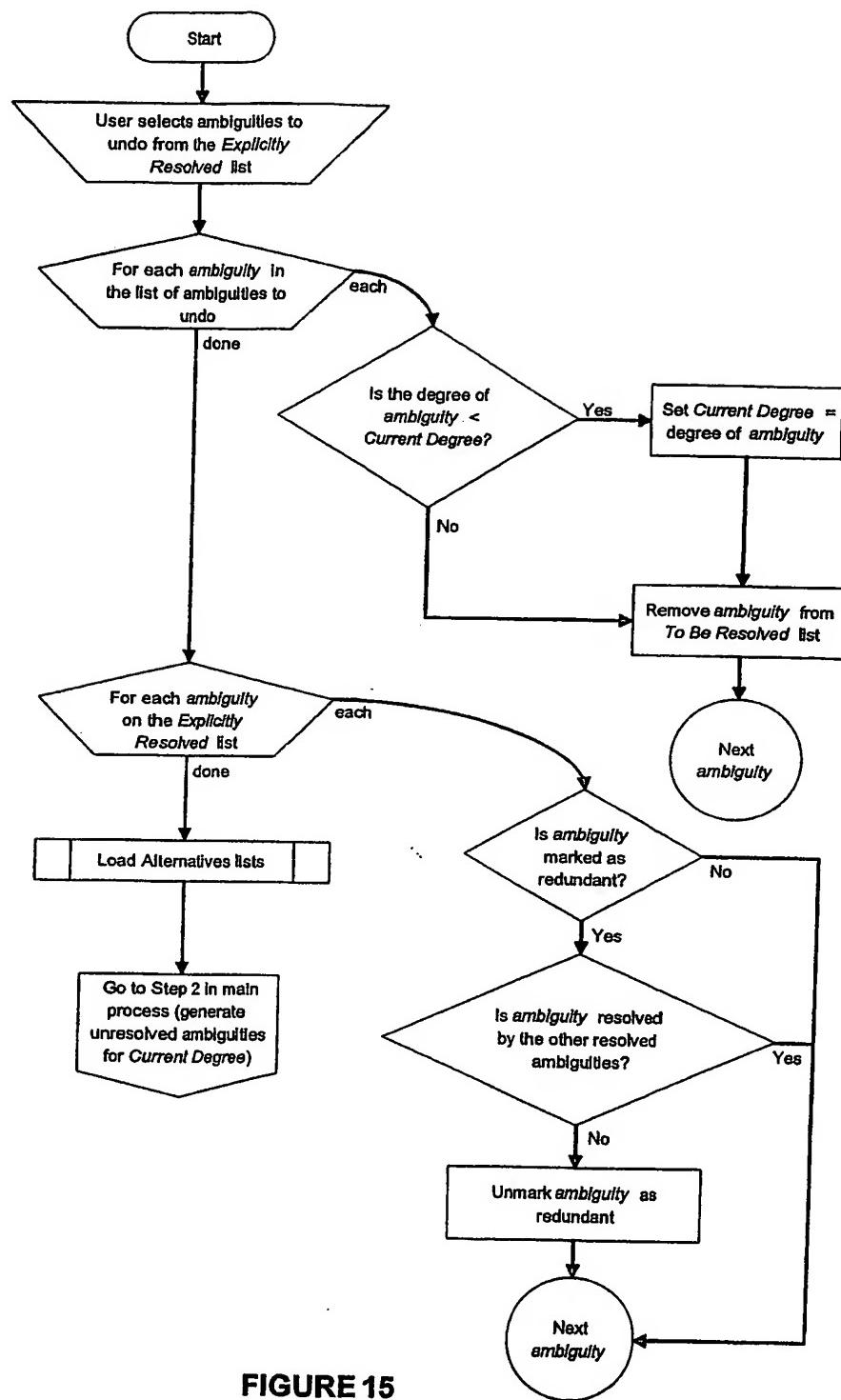
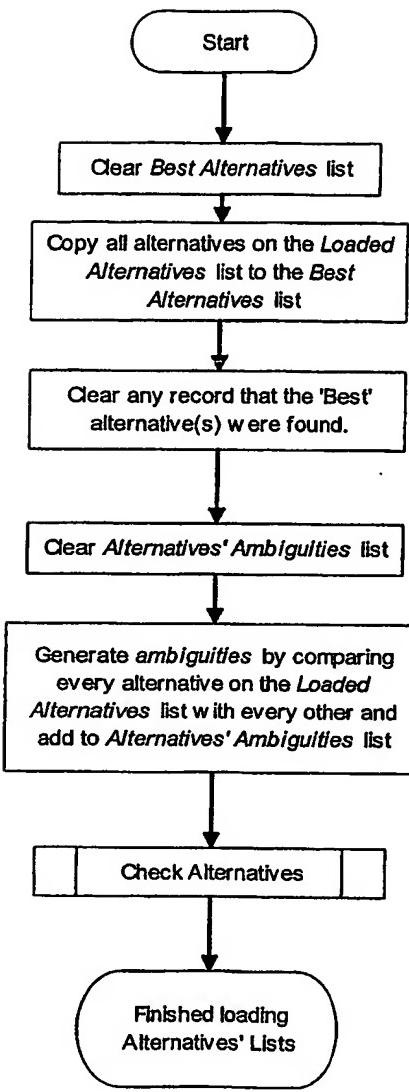


FIGURE 15

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**FIGURE 16**

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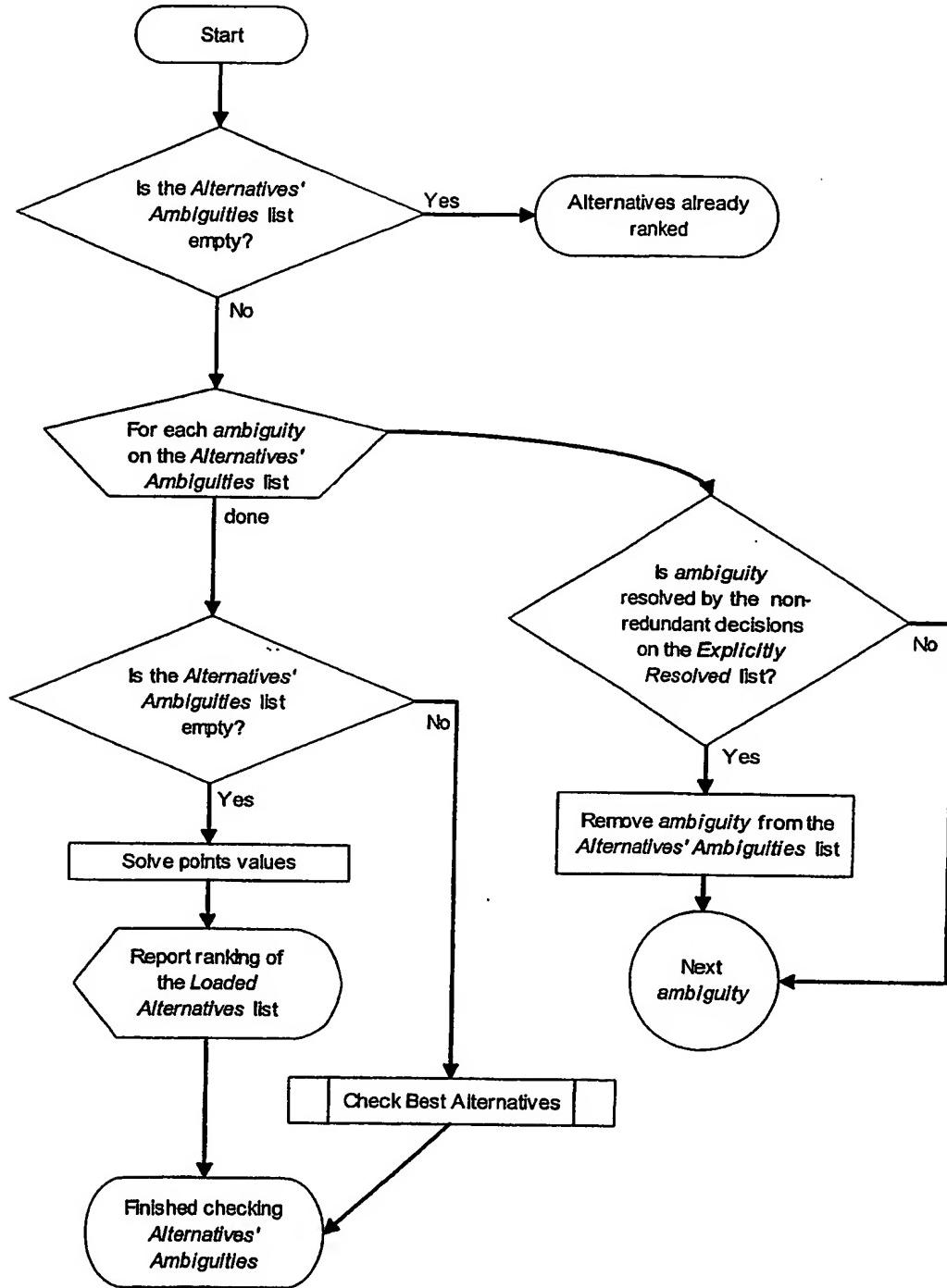


FIGURE 17

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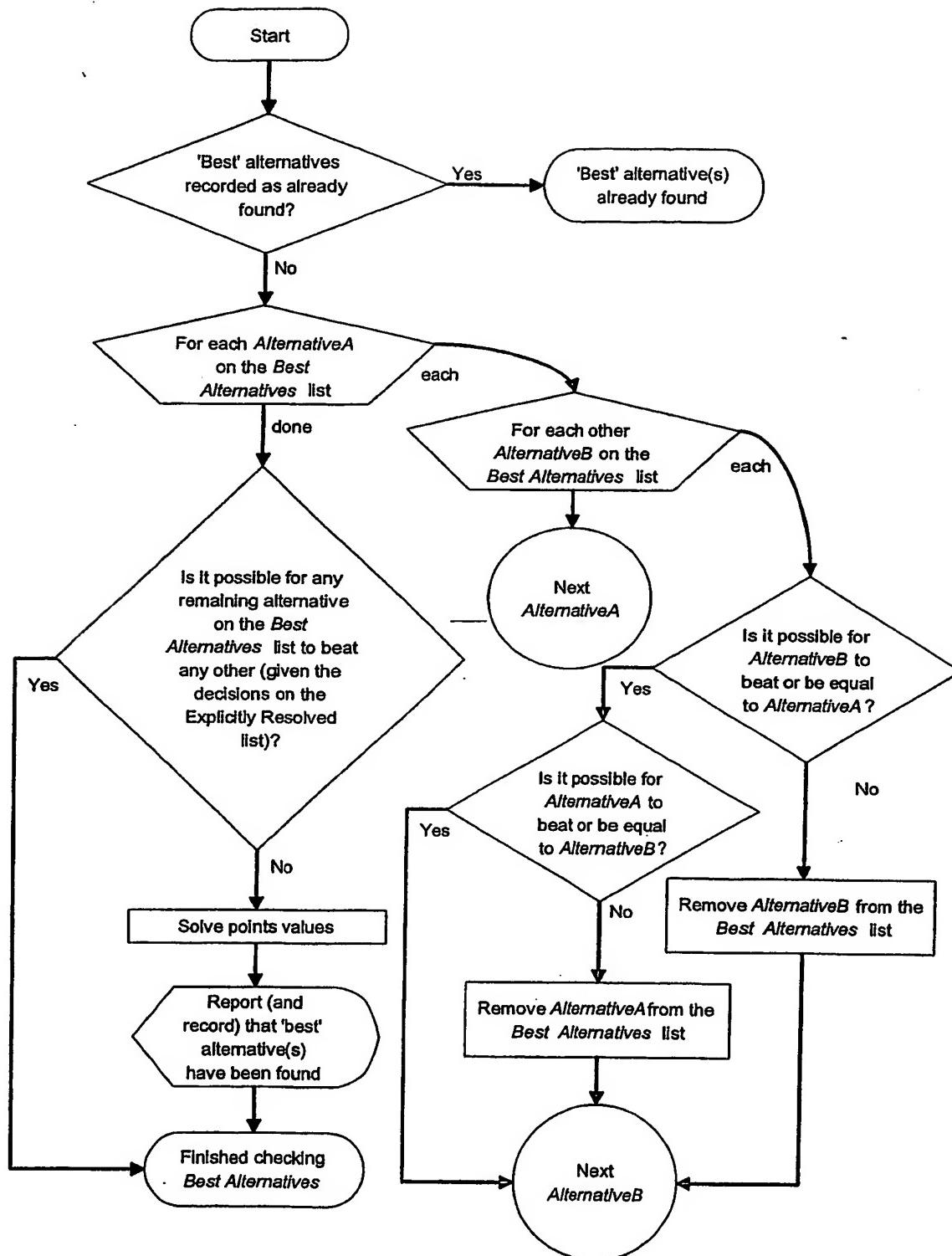


FIGURE 18

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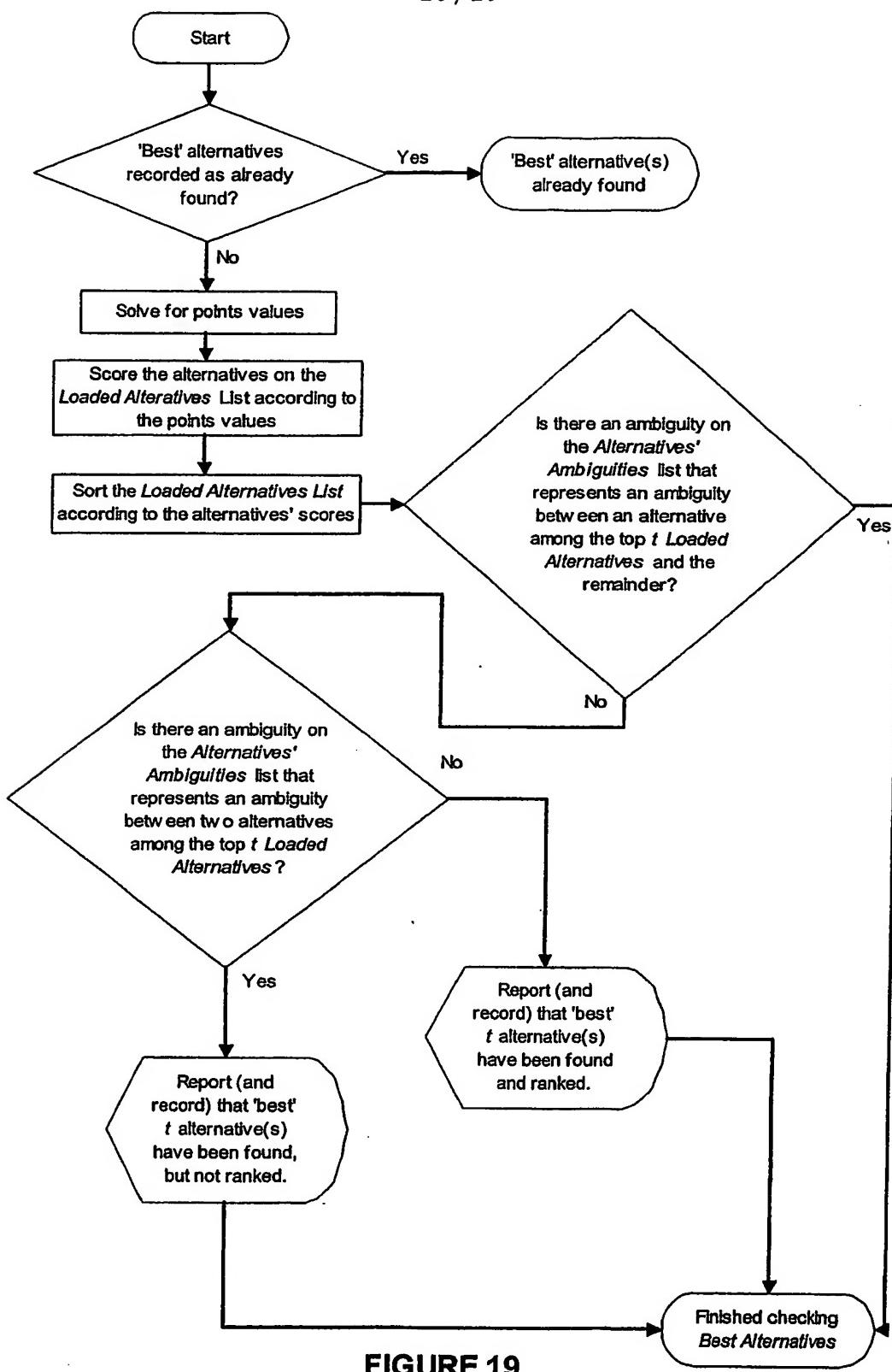


FIGURE 19